

6KV8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

FRAME-GRID CONSTRUCTION

*For Use as a Combined Voltage Amplifier
and Video Output Tube in TV Receivers*

ELECTRICAL

Heater Characteristics and Ratings

Voltage (AC or DC)	6.3 ± 0.6	V
Current at heater volts = 6.3	0.775	A
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode	200	V
Heater positive with respect to cathode	200 ^a	V

Direct Interelectrode Capacitances^b

Triode Unit:

Grid to plate	3.7	pF
Grid to cathode, pentode cathode, pentode grid No.3 & internal shield, and heater.	2.5	pF
Plate to cathode, pentode cathode, pentode grid No.3 & internal shield, and heater.	2.4	pF
Triode grid to pentode plate.	0.015 max	pF

Pentode Unit:

Grid No.1 to plate.	0.12 max	pF ←
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater.	13.0	pF
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater.	4.8	pF
Pentode plate to triode plate	0.17 max	pF

Characteristics, Class A₁ Amplifier

	Triode Unit	Pentode Unit		
Plate Supply Voltage.	—	125	200	V
Plate Voltage	200	—	—	V
Grid-No.2 Supply Voltage.	—	125	125	V
Grid-No.1 Supply Voltage.	-2	—	—	V
Cathode Resistor.	—	82	68	Ω
Amplification Factor.	70	—	—	
Plate Resistance (Approx.).	17500	55000	75000	Ω
Transconductance.	4000	21000	23000	μmho
Plate Current	4	16.5	20	mA ←
Grid-No.2 Current	—	3.1	3.5	mA ←
Grid-No.1 Voltage (Approx.)				
for plate current = 100 μA	-4.5	-4.2	-4.2	V

← Indicates a change.



RADIO CORPORATION OF AMERICA
Electronic Components and Devices

Harrison, N. J.

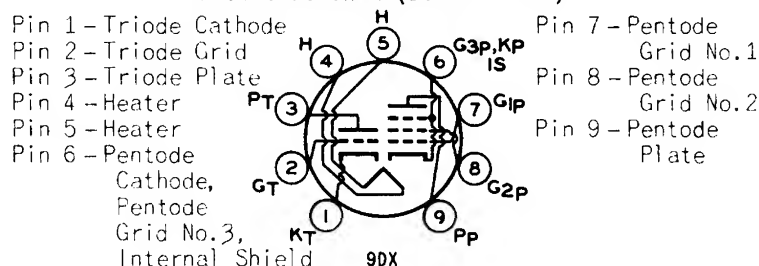
DATA 1
6-66

6KV8

MECHANICAL

Operating Position. Any
 Maximum Overall Length. 2-5/8 in
 Maximum Seated Length. 2-3/8 in
 Length, Base Seat to Bulb Top (Excluding tip). $2 \pm 3/32$ in
 Diameter. 0.750 to 0.875 in
 Dimensional Outline. See General Section
 Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)

BASING DIAGRAM (Bottom View)



AMPLIFIER — Class A₁ Design-Maximum Ratings

	Triode Unit	Pentode Unit	
Plate Voltage	300	300 max	V
Grid-No.2 (Screen-Grid) Supply Voltage.	-	300 max	V
Grid-No.2 Voltage	-	See Grid-No.2	
<i>Input Rating Chart at front of Receiving Tube Section</i>			
Grid-No.1 (Control-Grid) Voltage			
Positive-bias value	0	0 max	V
Grid-No.2 Input			
For grid-No.2 voltages up to 150 V.	-	1 max	W
For grid-No.2 voltages between 150 and 300 V.	-	See Grid-No.2	
<i>Input Rating Chart at front of Receiving Tube Section</i>			
Plate Dissipation	1	5 max	W

Maximum Circuit Values

	Triode Unit	Pentode Unit	
Grid-No.1-Circuit Resistance			
For fixed-bias operation.	0.5	0.1 max	MΩ
For cathode-bias operation.	1	0.25 max	MΩ

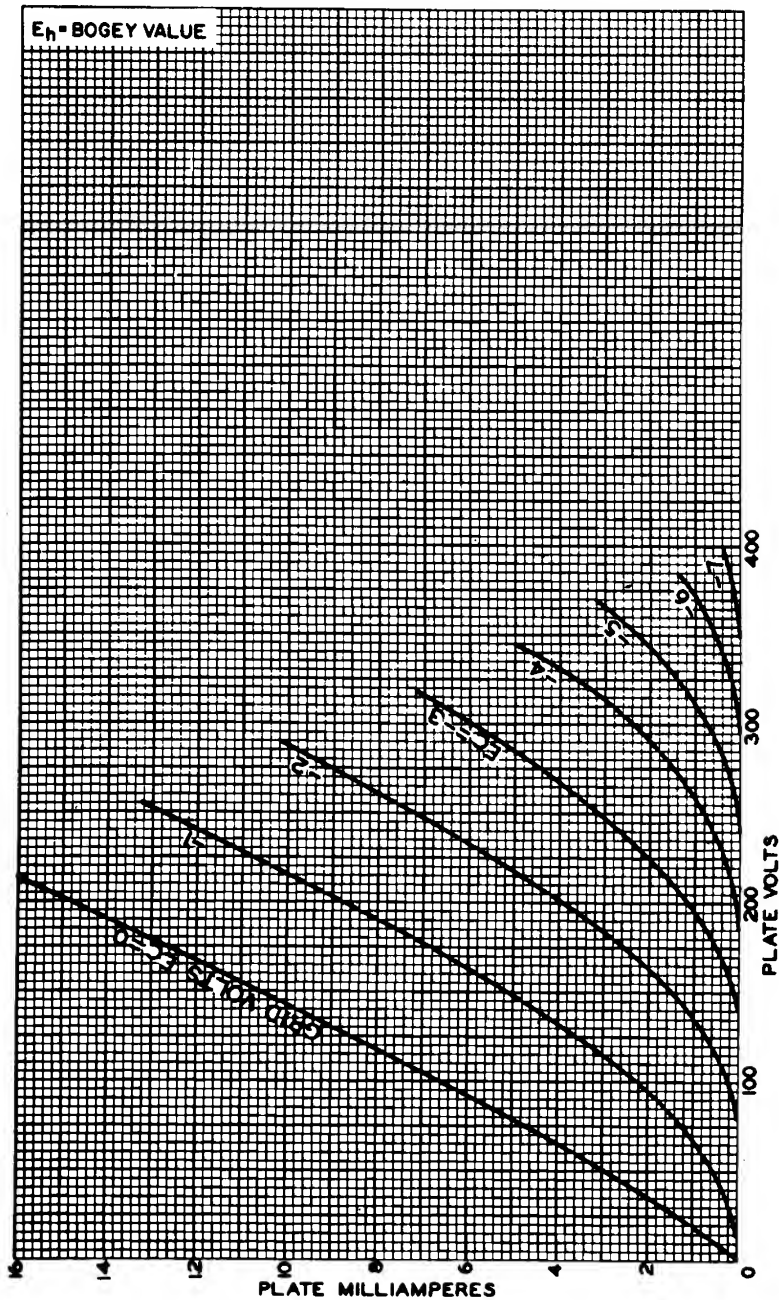
^a The dc component must not exceed 100 volts.

^b Without external shield.



6KV8

Average Plate Characteristics Triode Unit



92CM-8644RI

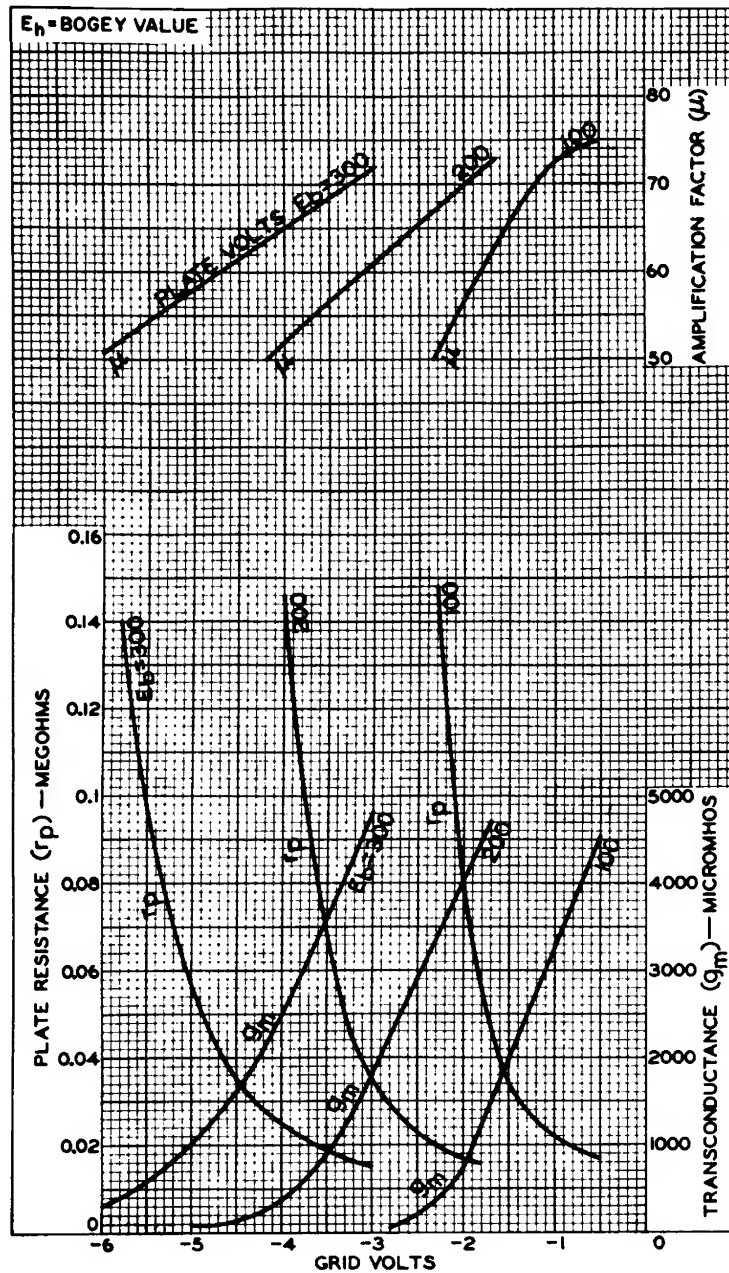


RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA 2
6-66

6KV8

Average Characteristics Triode Unit

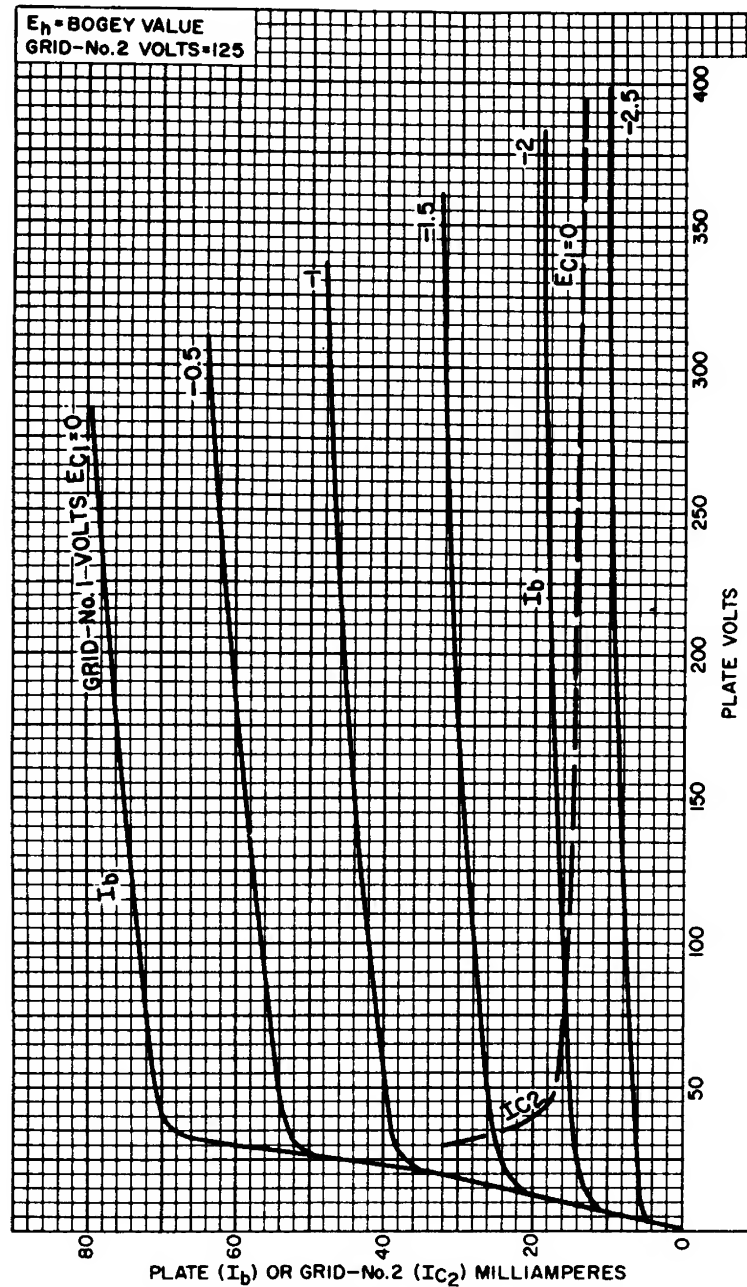


92CM-10874R1



6KV8

Average Characteristics Pentode Unit



92CM-11946R2

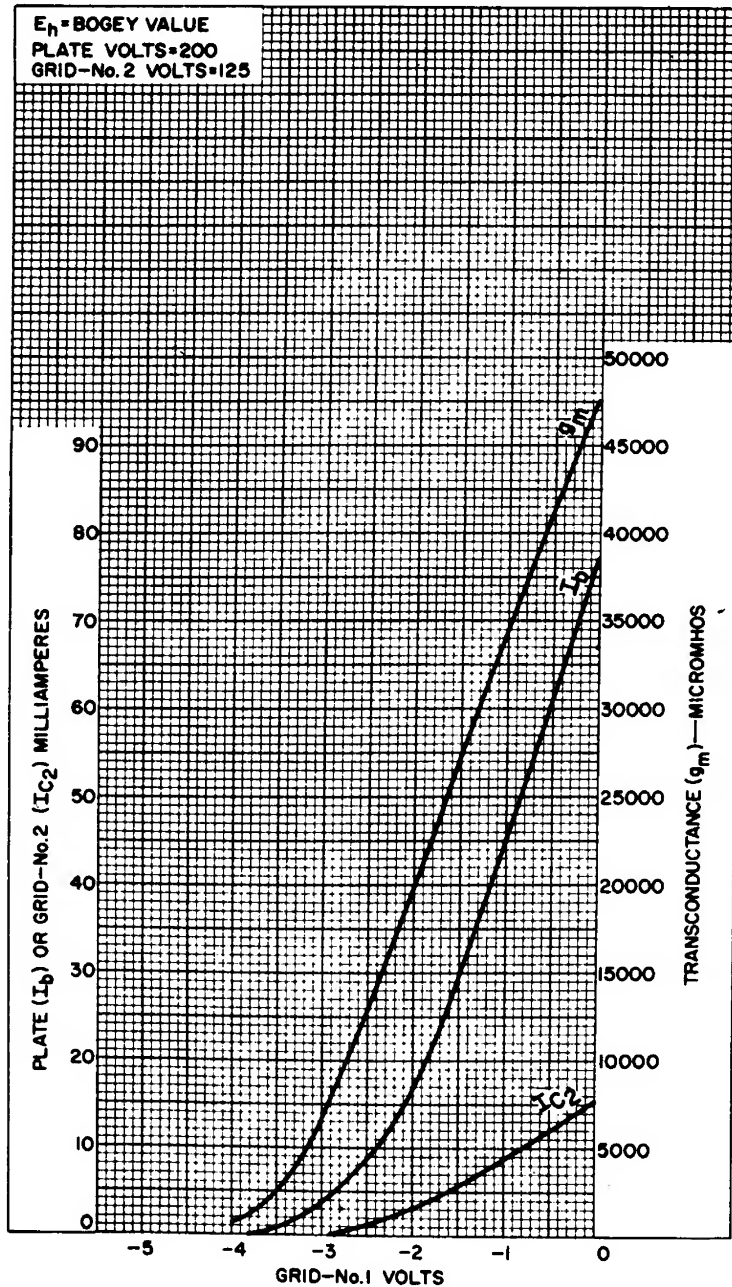


RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA 3
6-66

6KV8

Average Characteristics Pentode Unit



92CM-11947R2

DATA 3

RADIO CORPORATION OF AMERICA
Electronic Components and Devices

Harrison, N. J.

